



February 26, 2007

EMAIL

Ms. Amy M. Bennett
Standards Coordinator
Bureau of Water
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201

SUBJECT: THE NOTICE OF DRAFTING FOR THE TRIENNIAL REVIEW OF
SOUTH CAROLINA REGULATION 61-68, WATER CLASSIFICATION AND
STANDARDS COMMENTS

Dear Ms. Bennett:

The South Carolina Chamber of Commerce Environmental Technical Committee (Chamber) represents over two thousand companies having facilities in South Carolina. The Chamber appreciates the opportunity to submit comments on the Notice of Drafting published in the January 26, 2007 State Register concerning the triennial review of South Carolina Regulation 61-68, Water Classifications and Standards. The Chamber is interested in these potential changes to the regulations because of the potential impact on businesses and industry within South Carolina. The Chamber would like to share our concerns and comments for South Carolina Department of Health and Environmental Health and Environmental Control's (SCDHEC) consideration. Please see the attached comments.

Thank you for the opportunity to comment and for your consideration of these comments on the notice of drafting for SC R.61-68. If you have any questions, please feel free to call me at (803) 925-8318.

Sincerely,

Vernon Osteen
Water Subcommittee Chairman
Environmental Technical Committee
South Carolina Chamber of Commerce

cc: Ben Twilley – SC Chamber of Commerce
Jack Preston – SC Electric & Gas

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REVIEW OF REVISED FEDERAL WATER QUALITY CRITERIA

In light of the recent questions raised about the appropriateness of the arsenic standard and the need to revisit the standard after its adoptions into the South Carolina regulation, the Chamber strongly recommends that the scientific bases for the 15 proposed criteria be reviewed before they are adopted at face value. SCDHEC needs to make their evaluations of the scientific bases available for comment by the regulated community before the proposed criteria are adopted.

DEFINITION OF EPHEMERAL STREAM

The Chamber requests that the definition of ephemeral stream be refined to enable better identification of ephemeral streams through the use of biological indicators. SCDHEC should use scientifically defensible biological data for the development of the indicators.

DESIGNATED USES AND WATER QUALITY STANDARDS FOR EPHEMERAL STREAMS

The water quality standards that currently exist were not derived with ephemeral streams in mind and should not be applied to them. In their 2002, "Draft Strategy for Water Quality Standards and Criteria" EPA stated they would provide "guidance on adopting and implementing water quality standards for intermittent, ephemeral and effluent dependent waters" in 2004. More recently, EPA stated that they intend to provide written guidance after they complete a series of public meetings (Open Public Meeting on Designated Uses and Use Attainability Analysis, Atlanta, September 2005). To date they have not put forth that promised guidance. Although EPA has not completed their guidance, the Chamber requests that SCDHEC develop scientifically-based designated uses and water quality standards for ephemeral streams and include them within R.61-68. Until these uses and criteria are included in the regulation, the Chamber requests that language be added to the regulation or that a policy be implemented to require that individual permits issued by SCDHEC for discharges into ephemeral streams shall include only monitor and report requirements for all but conventional pollutants.

ARSENIC STANDARD

The Chamber recommends that SCDHEC revise the arsenic standard for organism only and water and organism consumption. Based on information provided in a study from the Electric Power Research Institute (EPRI), it was concluded that the assumptions that EPA used to derive its recommended arsenic water quality standards for organism only, and water and organism consumption, are technically flawed. EPRI concluded, and was supported by the EPA Region VI studies conducted in 2001, that arsenic does not readily bioaccumulate in freshwater fish at anywhere near the factors EPA used in their calculations. In addition, the EPRI study showed that the inorganic to organic ratio of arsenic used by EPA to calculate the organism criteria was incorrect. Based on revised bioaccumulation rates and bioconcentration factors, factoring in a conservative 17.5 kg/day daily dietary fish intake, and using an average percent of inorganic arsenic found in freshwater fish tissue, the resulting organism only arsenic standard is approximately 99 ppb. This is a much higher value than the 140 ppt number EPA recommended and indicates that the 18 ppt (water and organism) standard is also flawed.

SCDHEC should investigate the flaws in the method determining the organism only and the water and organism criteria. In order to maintain protection of human health and align

the standards with drinking water standards and groundwater standards, SCDHEC should revise the criteria to reflect the 10 ppb. The Maximum Concentration Level is a standard established by the EPA, using a rigorous scientific review process, to a level that provides protection to human health. Most states adopt the arsenic MCL as their surface water, groundwater, and drinking water standard.

COPPER CRITERIA

SCDHEC should consider the information available for updating copper criteria. EPA has recently issued a notice of availability (February 22, 2007 Federal Register) concerning the use of the Biotic Ligand Model (BLM) for determining the copper criteria as opposed to the hardness-dependent criteria. The BLM should be a more realistic model because it takes into consideration of more water quality variables than the hardness-based criteria.